

FIG. 1A

```

NcoI      10      20      30      KT1 36MER (SEQ
ID NO: 1)
GACCATGGGCTCTCCACGAGTTCGGCCTTCTGG
*** ||||| ||||| ||||| ||||| |||||
m g L L H E F G L E ... <--- upper case are
WT aa      278      280      282      284      286      288      <--- codon numbering for
WT aa      AGTTGGCAGCCTCTCCACGAGTTCGGCCTTCTGG . . . (SEQ ID NO: 14)
959      969      979      TaqPol.seq GenBank
entry
Accession No. J04639 (numbering includes 5' non-translated
region)

```

FIG. 1B

```

--other strand-- KLENTAQ32 35mer (SEQ ID NO: 3)
HindIII
26      16      ***** 6
GGACTGGCTCTCCGCCAAGGAGTAGTAAGCTTCGC
||||| ||||| ||||| ||||| ||||| ||
D W L S A K E *
826      828      830      832
GGACTGGCTCTCCGCCAAGGAGTAGTACCACC (SEQ ID NO: 15)
2604      2614      2624
TaqPol.seq

```

FIG. 2

```

10      20      30
GAGCCATGGGCTCTCCACGAGTTCGGCCTCTGG   KT1 36MER (SEQ ID NO:
1)
*** ||||| ||||| ||||| ||||| |||||
m g L L H E F G L E ... <-- upper case are
WT aa 278 280 282 284 286 288 <-- codon numbering for
WT aa
AGTTGGAAGCCTCTCCACGAGTTCGGCCTCTGG   Tfl.seq(SEQ ID NO: 16)
GenBank
X66105 1387 1397 1407 entry Accession number
      (numbering includes 5' non-translated
      region)

26      16
GGACTGGCTCTCGCCCAAGGAGTAGTAAGCTTCGC   --other strand--
||||| ||||| ||||| ||||| |||||         KLENTAQ32 35mer
D W L S A K E *
826 828 830
GGACTGGCTCTCGCCCAAGGAGTAGGGGGTCTCTG   Tfl.seq (SEQ ID NO:
17) 3032 3042 3052

```

FIG. 3

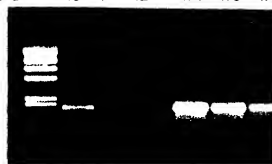
2 min. at indicated 99°, 98° or 97°, 10 min. 65° per cycle, 20 cycles.

	AmpliTaq			KlenTaq1			
99°	.8	.4	.2	1/4	1/8	1/16	<-- ul per 100 ul reaction.



<-- 2 KB product size

	AmpliTaq			KlenTaq1			
98°	.8	.4	.2	1/4	1/8	1/16	<-- ul per 100 ul reaction.



<-- 2 KB product size

	AmpliTaq			KlenTaq1			
97°	.8	.4	.2	1/4	1/8	1/16	<-- ul per 100 ul reaction.

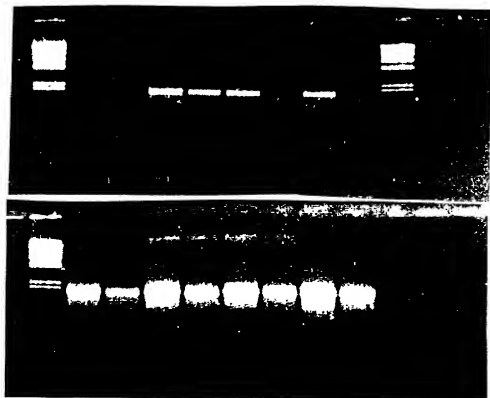


<-- 2 KB product size

FIG. 4

Top, figure 4A: 2 min. 98° C, 10 min. 65° C, 20 cycles
 Bottom, figure 4B: 2 min. 95° C, 10 min. 65° C, 20 cycles

λH3	AT		KT-278		ST		KT-291		λH3
std									std
	3/4	3/8	1/4	1/8	3	1.5	1/4	1/8	



0981002-10701

FIG. 5

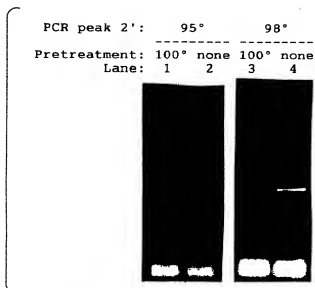


FIG. 6A

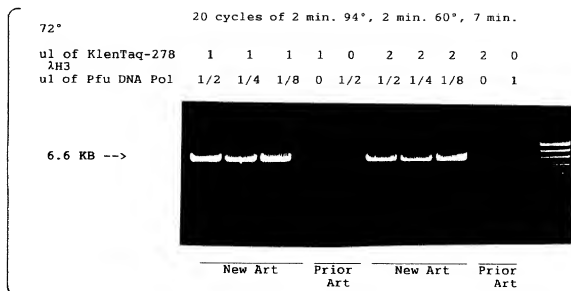


FIG.6B

20 cycles of 2 min. 94°, 2 min. 60°, 10 min. 72°

ul of KlenTaq-278	1	1	1	1	1	1	0
ul of Pfu DNA Pol	1/2	1/4	1/8	1/16	1/32	0	1/2



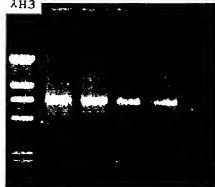
<--6.6KB

FIG.6C

20 cycles of 2 min. 95°, 1 min. 60°, 30 min. 72°

ul of KlenTaq-278	1	1	1	1	1
ul of Pfu DNA Pol	1	1/4	1/16	1/64	0

λH3



<--6.6KB

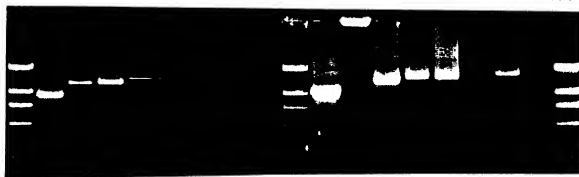
FIG. 7

Channel:	1	2	3	4	5	6	7	8
Template DNA:	λ plac5	λ pcytl	λ pcytl	λ plac5	λ plac5	λ K138	λ K138	λ K138
ng of template:	1	1	10	1	10	1	10	10
primer 1 SEQ ID NO:	9	7	7	10	10	7	7	9
primer 2 SEQ ID NO:	8	8	8	8	8	8	8	8
Size of PCR product								
Expected, in kb:	8.4	12.5	12.5	15	15	18	18	19.7

Conditions A

Conditions B

λ H3 1 2 3 4 5 6 7 8 λ H3 1 2 3 4 5 6 7 8 λ H3



Conditions C

λ H3 1 2 3 4 5 6 7 8 λ H3

